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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/636,142 08/06/2003		Yoshihiro Ue	01232D/LH 2383		
1933	7590 02/23/2004		EXAMINER		
FRISHAUF, HOLTZ, GOODMAN & CHICK, PC			FINEMAN, LEE A		
767 THIRD A		ART UNIT	PAPER NUMBER		
	, NY 10017-2023	2872			

DATE MAILED: 02/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

					in			
		Application	n No.	Applicant(s)				
Office Action Summary		10/636,14	2	UE, YOSHIHIRO				
		Examiner		Art Unit				
		Lee Finen		2872				
The MAILING Period for Reply	G DATE of this communication a	appears on the	cover sheet with the c	orrespondence add	dress			
THE MAILING DAT  - Extensions of time may be after SIX (6) MONTHS from the period for reply specified for reply is specified for reply is the period for reply in the period for reply within the Any reply received by the	TATUTORY PERIOD FOR REF TE OF THIS COMMUNICATION be available under the provisions of 37 CFR om the mailing date of this communication. crified above is less than thirty (30) days, a re- specified above, the maximum statutory perion as set or extended period for reply will, by state office later than three months after the mail strent. See 37 CFR 1.704(b).	N. 1.136(a). In no eve reply within the statu od will apply and wil tute, cause the appli	nt, however, may a reply be tim tory minimum of thirty (30) days I expire SIX (6) MONTHS from cation to become ABANDONE	nely filed s will be considered timely the mailing date of this co D (35 U.S.C. § 133).				
Status								
1) Responsive t	o communication(s) filed on	·						
2a) This action is	FINAL. 2b)⊠ TI	his action is no	on-final.					
3) Since this ap	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in acc	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
4)⊠ Claim(s) <u>1-6</u>	☑ Claim(s) <u>1-6</u> is/are pending in the application.							
4a) Of the abo	4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s)	Claim(s) is/are allowed.							
	Claim(s) <u>1-6</u> is/are rejected.							
•	• • • • • • • • • • • • • • • • • • • •							
8) Claim(s)	are subject to restriction and	d/or election re	equirement.					
Application Papers	*							
9) The specificat	ion is objected to by the Exami	iner.						
10)⊠ The drawing(s	10)⊠ The drawing(s) filed on <u>06 August 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.							
Applicant may	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement of	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)☐ The oath or d	eclaration is objected to by the	Examiner. No	te the attached Office	Action or form PT	O-152.			
Priority under 35 U.S.	C. § 119							
a)⊠ All b) □ S 1. □ Certifie 2. ☑ Certifie 3. □ Copies	tent is made of a claim for foreith some * c) Thome of:  and copies of the priority docume to copies of the priority docume to fine certified copies of the priority document to fine priority from the International Bureith	ents have been ents have been riority docume	n received. n received in Applicati ints have been receive	on No. <u>09836379</u> .	Stage			
	ed detailed Office action for a li	•		ed.				
232 44011								
Attachment(s)								
1) Notice of References	Cited (PTO-892) 's Patent Drawing Review (PTO-948)		4) Interview Summary Paper No(s)/Mail Da					
	Statement(s) (PTO-1449 or PTO/SB/0	08)	5) Notice of Informal P 6) Other:		9-152)			

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claim 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada, U.S. Patent Application Publication No. US 2001/0024320 A1 in view of Tomiyama et al., U.S. Patent No. 5,521,762.

Regarding claim 1, Okada discloses a focus stabilizing apparatus (fig. 1) comprising an objective lens (8) arranged opposite to an observation sample (M); a fixing base (7 with 11, when vibration unit as shown in fig. 3 is between 7 and 8; see page 3, section [0052], lines 11-15) for fixing the objective lens; a minute movement table (12) on which the objective lens is provided and provided between the fixing base and the sample base; springs (14) situated between the fixing base and the minute movement table (fig. 3) to allow the minute movement table to be moved in an optical axis direction of the objective lens; an actuator (13) provided between the fixing base and the minute movement table to minutely displace the minute movement table in the optical axis direction of the objective lens (fig. 4)); a displacement sensor (15) for detecting a displacement amount (page 3, section [0049]) of the objective lens; and control means (16) for allowing the actuator to perform an extending/contracting operation on the basis of a detection output of the displacement sensor to control the objective lens and bring it to a just-in-focus position relative to the observation sample. Okada discloses the claimed

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invention except for the springs being parallel springs. Tomiyama et al. teaches an objective lens holder (figs. 3 or 4) with parallel springs (60, 62, 70, 72) that allow a minute movement table (50) to be moved in an optical axis direction of the objective lens (not shown, at 100). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the springs of Okada with that of Tomiyama et al. because the springs can be efficiently manufactured from one piece to save manufacturing time as well as reduce costs (column 6, lines 31-40, Tomiyama)

Regarding claim 2, Okada further discloses a control loop for adjusting distance (page 3, section [0049]) with a memory section for storing an output of the displacement sensor corresponding to a just-in-focus state between the observation sample and a objective lens (in so far as a no vibration state (or zero state) is stored in the controller 16 when the object is in focus); a comparing section (16) for comparing an output of the displacement sensor (p>0) and an output of the displacement sensor stored in the memory section (p=0); and a control section (16) for outputting an electrical signal (s) for canceling a distance variation between the observation sample and the objective lens on the basis of a result of comparison by the comparing section (page 3, section [0049]).

Regarding claims 3, 5 and 6, Okada further discloses a sample base (2) for supporting the observation sample (M); a focus adjusting mechanism and a focus-adjusting handle (unnumbered; fig. 1) between the sample base and the fixing base.

Regarding claim 4, Okada further discloses wherein the objective lens is focused on the observation sample by the focus adjusting means (page 2, section [0037-0038], and then, the control means keeps the objective focused on the observation sample (page 3, section [0044]).

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Conclusion

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3. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. Kikuchi et al., U.S. Patent No. 5,007,712 discloses an objective lens with parallel

spring supports. Moore, U.S Patent No. 4,688,908 and Alexander et al., U.S. Patent No.

6,005,251 disclose using minute movement tables and parallel springs to move elements in a

direction perpendicular to the optical axis.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The

examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Drew Dunn can be reached on (571) 272-23124. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LAF

February 5, 2004

MARK A. ROBINSON PRIMARY EXAMINER